

# METHOD FOR MANUFACTURING A LIGHT GUIDE PLATE USING INJECTED GAS

## Abstract

A method for manufacturing a light guide plate (41, 51, 61) includes the steps of providing a mold (20), melting resin material and mixing an inert gas into the molten resin material, injecting the mixture of the molten resin material and the inert gas into a cavity (26) of the mold, cooling the mold under a constant pressure, and demolding and taking the light guide plate out from the mold. The inert gas decreases the viscosity of the molten resin material, so that the light guide plate is formed with high uniformity. In addition, because the molten resin material is mixed with the inert gas, the formed light guide plate is lighter in weight. Moreover, no printing process is required. This means that the time needed for production is shortened, and the costs of producing the light guide plate is reduced.